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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,790	01/13/2004	Thomas Arnold Anschutz	9400-62	2954
39072 7590 06/18/2007 MYERS BIGEL SIBLEY & SAJOVEC, P.A. P.O. BOX 37428 RALEIGH, NC 27627			EXAMINER ALAM, UZMA	
			ART UNIT 2157	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	Application No. 10/756,790	Applicant(s) ANSCHUTZ ET AL.	
	Examiner Uzma Alam	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/16/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the application filed on January 13, 2004. Claims 1-55 are pending. Claims 1-55 represent a method, system and computer program product for modifying bandwidth and/or QoS for a user session in a network.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-55 contain the phrase "and/or." This phrase renders the claim vague and can be interpreted as claiming just one element, or both elements in combination. If the intention is to claim just one element, it is not clear which element is being claimed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Chellis et al. US Patent No. 6,901,446 (herein referred to as "Chellis"). Chellis teaches the invention as claimed including a system and method for allocating resources.

As per claim 1, Chellis teaches a method of modifying bandwidth and/or Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) that facilitates differentiated end-to-end data transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP) and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at the NSP and/or the ASP [resource allocator 30, resource request manager 40] to change bandwidth and/or QoS [resource 25] associated with the user's [consumer 20; component] session (request for more resources; column 3, line 54-57; column 4, lines 28-40; column 8, lines 36-41; column 9, lines 1-15); and

using Application Programming Interface (API) calls [abstract] at the NSP and/or the ASP to communicate with the RAN to modify the bandwidth and/or QoS associated with the user's session (allocating resources; column 4, lines 28-40; column 8, lines 18-26; column 8, lines 51-60; column 21, lines 16-45).

As per claim 2, Chellis teaches the method of Claim 1, wherein receiving the request comprises: initiating the request at the NSP and/or the ASP to change the bandwidth and/or QoS associated with the user's session (the resources are allocated based on network monitoring; column 4, lines 28-40; column 10, lines 43-50; column 14, lines 29-64)

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As per claim 3, Chellis teaches the method of Claim 1, wherein receiving the request comprises: receiving the request at the NSP and/or the ASP from a user to change the bandwidth and/or QoS associated with the user's session (sending a request from a user; column 4, lines 28-40; column 10, lines 43-50; column 14, lines 29-64).

As per claim 4, Chellis teaches the method of Claim 3, wherein the QoS associated with the user's session is scheduling resources (resources determined based on timings; column 4, lines 28-40; column 11, lines 15-57).

As per claim 5, Chellis teaches the method of Claim 4, wherein using the API comprises: sending a query from the NSP and/or the ASP to the RAN to obtain a bandwidth range and/or QoS capabilities from the RAN (determining resource availability; column 3, lines 45-58; column 4, lines 40-58; column 12, lines 39-57).

As per claim 6, Chellis teaches the method of Claim 5, further comprising: presenting to the user via the ASP and/or the NSP at least one bandwidth/QoS option within the bandwidth range and/or QoS capabilities received from the RAN (column 4, lines 40-58; column 15, lines 59-67; column 16, lines 1-26).

As per claim 7, Chellis teaches the method of Claim 6, further comprising:
obtaining a user selection of one of the at least one bandwidth/QoS option at the NSP and/or the ASP (determining the user's choice for resources; column 4, lines 40-58); and

updating the RAN with information to provide the selected bandwidth/QoS option for the user's session (column 11, lines 15-57; column 15, lines 56-67; column 16, lines 1-26; column 19, lines 8-47).

As per claim 8, Chellis teaches the method of Claim 7, further comprising: updating the CPE with the information to provide the selected bandwidth/QoS option for the user's session (column 11, lines 15-56; column 13, lines 45-67).

As per claim 9, Chellis teaches the method of Claim 8, wherein updating the CPE with information comprises: sending an update session bandwidth info message and/or a QoS-related message from the RAN to the CPE that contains a request for changing the bandwidth/QoS associated with the user's session to the selected bandwidth option in the CPE (column 11, lines 15-56; column 13, lines 45-67).

As per claim 10, Chellis teaches the method of Claim 9, wherein updating the RAN with information further comprises: updating a rate limit and/or QoS associated with a communication queue in the RAN that is used to process traffic associated with the user's session (column 4, lines 40-58; column 10, lines 56-67; column 16, lines 1-26).

As per claim 11, Chellis teaches the method of Claim 7, wherein updating the RAN with information comprises: sending a change session bandwidth request message from the NSP and/or the ASP to the RAN that contains a request for changing the bandwidth associated with

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the user's access session to the selected bandwidth option in the RAN (column 11, lines 15-56; column 13, lines 45-67).

As per claim 12, Chellis teaches the method of Claim 11, further comprising: sending a change session bandwidth response message from the RAN to the NSP and/or the ASP that contains an acknowledgement for the change session bandwidth request message (column 11, lines 15-56; column 13, lines 45-67).

As per claim 13, Chellis teaches the method of Claim 11, wherein updating the RAN with information further comprises: updating a rate limit associated with a communication queue in the RAN that is used to process traffic associated with the user's session (column 4, lines 40-58; column 10, lines 56-67; column 16, lines 1-26).

As per claim 14, Chellis teaches the method of Claim 5, further comprising: authenticating the NSP and/or the ASP with the RAN prior to sending the query from the NSP and/or the ASP to the RAN (column 4, lines 40-59; column 8, lines 63-67).

As per claim 15, Chellis teaches the method of Claim 14, wherein authenticating the NSP and/or the ASP with the RAN comprises:
sending an establish service session request message from the NSP and/or the ASP to the RAN that contains an identification of the NSP and/or the ASP and authorization credentials (column 3, lines 63-67; column 15, lines 56-67); and

sending an establish service session response message from the RAN to the NSP and/or the ASP that contains an authentication result (column 9, lines 40-67; column 16, lines 1-26).

As per claim 16, Chellis teaches the method of Claim 5, wherein sending the query comprises: sending a query session bandwidth request message from the NSP and/or the ASP to the RAN that contains a request for bandwidth information associated with the user's session (column 10, lines 1-42; column 19, lines 8-47); and

sending a query session bandwidth response message including scheduling resources from the RAN to the NSP and/or the ASP that contains the bandwidth range (column 11, lines 15-56; column 13, lines 45-67).

As per claim 17, Chellis teaches the method of Claim 1, wherein the request is a first request, the method further comprising:

updating the RAN and the CPE with information to modify the bandwidth and/or QoS associated with the user's session (column 4, lines 40-58; column 9, lines 1-15);

then receiving a second request at the NSP and/or the ASP to delete or change bandwidth and/or QoS associated with the user's session (column 9, lines 16-37); and

using API calls at the NSP and/or the ASP to communicate with the RAN to change the bandwidth and/or QoS associated with the user's session to a default value in the RAN (column 10, lines 1-42).

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As per claim 18, Chellis teaches the method of Claim 1, wherein the RAN comprises a Broadband Remote Access Server (BRAS) (column 9, lines 1-15).

5. Claims 19-36 and 37-54 are rejected under the same rationale as claims 1-18 because they teach the system and computer program product of the method of claims 1-18.

As per claim 55, Chellis teaches a method of modifying bandwidth and/or Quality of Service (QoS) for a user session in a network that comprises a Regional/Access Network (RAN) that facilitates differentiated end-to-end data transport between a Network Service Provider (NSP) and/or an Application Service Provider (ASP) and a Customer Premises Network (CPN) that includes Customer Premises Equipment (CPE), comprising:

receiving a request at the NSP and/or the ASP [resource allocator 30, resource request manager 40] to change bandwidth and/or QoS [resource 25] associated with the user's [consumer 20; component] session (request for more resources; column 3, line 54-57; column 4, lines 28-40; column 8, lines 36-41; column 9, lines 1-15); and

using messaging interface calls [abstract] at the NSP and/or the ASP to communicate with the RAN to modify the bandwidth and/or QoS associated with the user's session (allocating resources; column 4, lines 28-40; column 8, lines 18-26; column 8, lines 51-60; column 21, lines 16-45).

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Byers US Patent No. 6,975,594

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Tuesday 5:30 AM - 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Uzma Alam
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June 8, 2007


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